

**USDA Forest Service
USDI Bureau of Land Management**

KM Strategic Plan



Draft: Version 3.0



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Note: The USDA Forest Service (FS) and USDI Bureau of Land Management (BLM) greatly appreciate the willingness of the Federal Aviation Administration (FAA) to share its "KS Strategic Plan" document. Reflecting the true spirit of sharing and collaboration, this gesture enables the FS and BLM to learn from and build on FAA's extensive research in this area.



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1.0 Executive Summary¹

This document gives a brief overview of knowledge, knowledge management (KM), and how to strategically introduce KM into the USDA Forest Service (FS) and USDI Bureau of Land Management (BLM). First, there is a need to define the meaning of a KM strategy. It is the art and science of creating, expanding, protecting, and using the knowledge of an organization or group of organizations to give maximum support to their missions.

The FS and BLM are the world's premier leaders in natural resource management and stewardship. To maintain effectiveness and efficiency in the 21st century, the agencies are transforming themselves to become strategically responsive to changes in a complex, dynamic global environment. As part of this transformation, the FS and BLM are making fundamental shifts in their organization and mission, and the ways manage and use information concepts and technologies.

The joint KM Strategic Plan outlines the vision, goals, and objectives of the two agencies to become knowledge-based organizations. Their vision:

"A transformed FS and BLM with agile capabilities and adaptive processes powered by world class network-centric access to knowledge, systems, and services, compatible with the local environment."

Becoming a knowledge-based organization involves more than technologies – it requires major cultural shifts – from hoarding to sharing knowledge, from stovepipe to enterprise processes; and from traditional skills to Internet-age competencies. The FS and BLM's goal is to rapidly transform themselves into network-centric, knowledge-based organizations to give the agencies exceptional decision-making capabilities. To achieve this goal, the two agencies' intellectual capital (individuals, teams, organizations, systems, collaborative insights, and experiences), infostructure capabilities, and governance structures must be properly prepared.

Leadership and trust are at the heart of the FS and BLM KM. The agencies need the advocacy, support, and commitment of management and staff to implement this plan – to ensure that the FS and BLM will be able to continue to offer the best and the safest land resources in the world.

2.0 Guiding Principles

The guiding principles for the FS and BLM KM are comprehensive and fundamental rules by which the organizations will conduct current and future KM initiatives. They are the underlying tenets upon which the FS and BLM will build and institutionalize their KM program. These tenets will enable the FS and BLM to make a fundamental shift in how they operate.

The FS and BLM KM guiding principles are grouped into three major areas:

- Change catalysts.
- Intellectual capital.
- Infostructure.

Change catalysts are the innovative policies, governing bodies, and culture changes that are necessary to create a network-centric environment and a knowledgeable workforce.

Intellectual capital is the expertise, insight, and experience that reside in the workforce—including managers, staff, and industry partners.

These guiding principles serve as the foundation on which KM will build, grow and develop:



2.1 Change Catalysts

- Foster the FS and BLM values as the foundation for KM.
- Optimize transformation through good business practices and IRM.
- Use innovative management approaches to manage KM.

2.2 Intellectual Capital

- Create a knowledge-based organization capable of high-quality decision-making in all situations.
- Attract, retain, and continuously renew skills to create a world-class workforce.
- Provide cogent information and collaborative capabilities to all employees.

2.3 Infostructure

- Manage the FS and BLM infostructures as an enterprise.
- Develop the joint KM portal as the FS and BLM's enterprise portal and e-business gateway to both agencies.
- Assure universal access, security, privacy, and reliability of systems and services.
- Provide connectivity with all field locations through an upgraded backbone.

3.0 Relationship to Agency Level Policy and Guidance

7.1 USDA FS strategic plan

http://fsweb.wo.fs.fed.us/rpa/Draft_Watermark_SP.pdf

7.2 USDI BLM strategic plan

<http://www.blm.gov/nhp/info/stratplan/strat0105.pdf>

4.0 KM Goals²

- Adopt governance and cultural changes to become a knowledge-based organization.
- Integrate KM concepts and good business practices into the FS and BLM processes to improve performance.
- Manage the infostructure as an enterprise to enhance capabilities and efficiencies.
- Institutionalize the joint KM portal as the enterprise portal to provide universal, secure access for the entire FS and BLM workforce.
- Harness human capital for the knowledge-based organization.

The KM objectives and initiatives included in the joint KM portal document will be worked in parallel, not in succession.

4.1 Strategic Goal 1

The organizational culture will support the existence of a knowledge-based organization.

The first goal acknowledges that KM is a key driver of the FS and BLM transformation. Specifically, KM brings to the agencies streamlined operations, a collaborative e-business model, technologies, and an empowered, knowledge-generating workforce.



The successful implementation of KM in the FS and BLM requires a strong partnership with IRM and Human Resource Management through the use of AgLearn and [whatever system is used by the BLM]. It also requires new or revised governing bodies responsible for promulgating KM policies, conducting KM initiatives from an enterprise level, and securing the resources to achieve KM. The agencies will need to create an organizational structure to institutionalize KM principles and methodologies.

4.2 Strategic Goal 2

KM concepts and good business practices are embedded in FS and BLM processes to improve performance.

This goal focuses upon infusing KM principles and concepts into the work of the enterprise.

- The agencies should promote KM and information exchange with industry, academia, and professional societies to serve as models of excellence.
- Knowledge should be transferred enterprise-wide across functional lines.
- The agencies should foster Communities of Practice (COP) and partnerships as change catalysts toward creating a knowledge-based organization.

4.3 Strategic Goal 3

The infostructure is managed as an enterprise to enhance capabilities and efficiencies.

As the FS and BLM's IRM infrastructure is managed at an enterprise level, strong partnership with IRM can reduce costs, improve security, provide better configuration management, and facilitate workforce strategies in line with the agencies' transformation.

New paradigms must be adopted that enable the FS and BLM to manage their infostructure as a common service, potentially through central funding.

To streamline systems, current and future technological innovations must be effectively applied to the FS and BLM's business processes. New systems must use agency-wide standard architecture managed from an enterprise perspective to ensure interoperability.

4.4 Strategic Goal 4

The Joint KM Portal is institutionalized as the enterprise portal to provide universal, secure access for the entire FS and BLM.

A Joint KM Portal will provide the infostructure necessary to develop and maintain a scalable KM system for the enterprise. A robust, scalable portal will provide a single port of entry to the applications valuable to the enterprise. These applications include, content management software, collaborative tools, expertise and people locator, data warehouses, and document repositories in response to customer demands. Accompanying documents – Joint KM portal, Sage (an expertise locator), and Employee Site – delineate further requirements.

4.5 Strategic Goal 5

Human Capital is harnessed for the knowledge-based organization.

Today's FS and BLM are harnessing their human capital (HC) through rapid



information access and expanded KM. The complexity and impact of this new approach will fundamentally reshape every aspect of work and life. In a knowledge-based organization the contexts shift from individual domains of practice to COPs that generate and share knowledge.

A knowledge-based organization must be flexible enough to respond to the needs of workers. Leaders must communicate their vision and expectations to build a framework for KM that has a strong HC infrastructure in which knowledge is shared across the entire organization.

5.0 New Initiatives

To help quicken that cultural change, the following initial steps are recommended.

5.1 Create a New Joint KM Office

The Joint KM Office, headed by a Chief Knowledge Officer (CKO), will serve the needs of both agencies. The office and its functions are described in a separate document titled Joint KM Office.

5.2 Create a Joint KM Portal

A good initial project to introduce KM into the FS and BLM is an enterprise-wide KM portal. A portal would provide an online workspace that houses all the FS and BLM business resources, including tools, processes, productivity enhancers, knowledge, learning, and collaboration. The portal and its functions are described in a separate document titled Joint KM Portal

5.3 Adjust the Performance Evaluation System

An indispensable step in promoting knowledge sharing is a change in our evaluation system. Instead of encouraging individual contributions, the FS and BLM can bring about behavioral changes by rewarding behaviors that contributes to a team, a network, the agency.

5.4 Specifics

5.4.1 Consolidation of efforts

Based on a well coordinated recommendation by the CKO, the Joint Executive Advisory Board (JEAB) advise both agency heads to request their executives to provide the Joint KM Office a list of their existing and currently planned KM initiatives, good business practices, and lessons learned so the enterprise can begin to capitalize on existing activities and identify gaps and opportunities.

5.4.2 Joint KM Portal

By an as-yet-to-be-determined date, the FS and BLM will convert the intranet into an enterprise portal. The proposed KM portal will give managers and staff easy access to information and services they need to do their jobs. The heads of both agencies must work with their executives to streamline and Web-enable existing applications and link these applications to the new portal by that date, or obtain a waiver from the each agency's Chief Information Officer (CIO).



6.0 Lessons Learned

The FS and BLM can learn from others who have already implemented KM within their organizations:

- Amr A. ElSawy, senior vice president, MITRE and general manager, MITRE Center for Advanced Aviation System Development, instituted a policy that each time an employee gives an internal or external presentation, that presentation must be posted online for reuse by others. This policy has saved the organization scarce resources by not having to reinvent the wheel.
- James Wolfenson, president of the World Bank Group, changed the mission of the bank from a “lending bank” to a “knowledge bank.” The bank’s KM site³ shows how the organization is exploiting its knowledge to fight world poverty. Becoming a knowledge bank represents a major shift in the way the World Bank supports international development. KM has helped it to:
 - Make effective use of knowledge to enhance the quality of operations.
 - Share key knowledge with clients and partners.
 - Help clients access and use knowledge from around the world to solve local problems.

The World Bank Group implements KM with staff, clients, and partners through:

- Thematic groups⁴ or communities of practice that facilitate sharing of experiences across internal and external boundaries.
- Advisory services⁵ that give quick and easy access to information, knowledge, and solutions.
- Knowledge initiatives⁶ that bring together leading development practitioners to exchange experiences and develop the skills of client countries.

7.0 Moving Forward⁷

7.1 Set the Vision

- Define a compelling vision and reason to change.
- Ensure that proactive senior leaders coordinate this initiation.
- Focus on one or two priorities at a time.
- Establish a governance model.

7.2 Build a Roadmap

- Focus on customer experience, not government offerings.
- Use customer advocates to define needs.
- Change processes and organization to meet customer needs.
- Clear plan for employee development.
- Balance “carrots and sticks” to move forward.

7.3 Request the Development of the Supporting IRM Plan

- Consolidate to reduce hardware cost and complexity.
- Use real industry standards – not product defaults.
- Define overall enterprise architecture.
- Define enterprise portal strategy – look and feel, linkages, and updates.
- Build security into the system – it is not an “add-on.”



7.4 Extend the Impact

- Extend infrastructure to suppliers and customers.
- Optimize the value chain around key constituents.
- Consider utility-like functions.

7.5 Next Steps

To enable the two agencies to get where they are heading, they need to create a service delivery model [vision] showing what the organization could look like in the short term and in five years in term of:

- People.
- Process.
- Technology.
- Organization.

Case for Change:

- Savings.
- Improved quality.

Phased implementation roadmap:

- Quick hits.
- Change management.
- Technology.

Enhanced governance process:

- Headquarters
- Functional area.
- Operations (internal and external customers).



Appendix A – References

A-1 Laws

A-1.1 Acquisition Results Act of 1998

The purpose of this Act is to improve the performance of the Federal procurement system by managing for results and by improving the capability of the federal acquisition workforce to achieve the desired results.

A-1.2 Chief Financial Officers (CFO) Act of 1990 (Public Law 101-576)

The CFO Act provides a framework for improving federal government financial systems. It centralizes within OMB, through the Deputy Director for Management and the Office of Federal Financial Management, the establishment and oversight of federal financial management policies and practices and requires OMB to prepare and submit to Congress a government-wide, 5-year financial management plan. The act also requires the 24 major agencies to have CFOs and deputy CFOs and lays out their authorities and functions. Further, the act sets up a series of pilot audits under which certain agencies are required to prepare service wide financial statements and subject them to audit by the agencies' inspectors general.

A-1.3 Clinger-Cohen Act of 1996 (Public Law 104-106)

This law is intended to improve the productivity, efficiency, and effectiveness of federal programs through the improved acquisition, use, and disposal of IT resources. Among other provisions, it (1) encourages federal agencies to evaluate and adopt best management and acquisition practices used by both private and public sector organizations, (2) requires agencies to base decisions about IT investments on quantitative and qualitative factors associated with the costs, benefits, and risks of those investments using performance data (such as reduced costs, improved employee productivity, and higher customer satisfaction) to demonstrate how well the IT expenditures support improvements to service programs, and (3) requires executive agencies to appoint CIOs to carry out the IT management provisions of the act and the broader information resources management requirements of the Paperwork Reduction Act. The Clinger-Cohen Act also streamlines the IT acquisition process by eliminating the General Service Administration's central acquisition authority, placing procurement responsibility directly with federal agencies, and encouraging the adoption of smaller, modular IT acquisition projects.

A-1.4 Computer Security Act of 1987 (Public Law 100-235, as amended by Public Law 104-106)

This law addresses the importance of ensuring and improving the security and privacy of sensitive information in federal computer systems. The act requires that the National Institute of Standards and Technology develop standards and guidelines for computer systems to control loss and unauthorized modification or disclosure of sensitive information and to prevent computer-related fraud and



misuse. The act also requires that all operators of federal computer systems, including both federal agencies and their contractors, establish security plans.

A-1.5 Copyright Act

It protects the intellectual property of authors and creators as contained in works (print and non-print) and includes the provisions of Fair Use.

A-1.6 Federal Acquisition Streamlining Act (FASA) of 1994

Law designed to overhaul the cumbersome and complex federal procurement system. Among the many aspects of this law, it eliminates most paperwork and record keeping requirements for acquisitions below \$100,000 and allows direct micro-purchases of items below \$2,500 without competitive quotations or compliance with Buy American Act and certain small business requirements.

A-1.7 Federal Financial Management Improvement Act of 1996 (Public Law 104-208)

This Act requires that service financial management systems comply with federal financial management system requirements, applicable federal accounting standards, and the *U.S. Government Standard General Ledger* (SGL) in order to provide uniform, reliable, and more useful financial information. The act requires that auditors for each of the 24 departments and agencies named in the CFO Act report, as part of their annual audits of the agencies financial statements, whether the agencies financial management systems comply substantially with federal financial management systems requirements, applicable federal accounting standards, and SGL at the transaction level. The act also requires that GAO report on its implementation annually.

A-1.8 Freedom of Information Act of 1966

The federal law that establishes the public's right to request existing records from federal government agencies. Anyone can file a FOIA request, including US citizens, foreign nationals, organizations, universities, businesses and state and local governments. Organizations required to submit to FOIA requests include the executive branch departments, federal agencies, including federal regulatory agencies, and federal offices.

A-1.9 Federal Managers Financial Integrity Act (FMFIA) of 1982 (Public law 97255)

FMFIA requires agencies to establish internal accounting and administrative controls in compliance with standards established by the Comptroller General. The act also requires that OMB establish, in consultation with the Comptroller General, guidelines that the agencies shall follow in evaluating their systems of internal accounting and administrative controls.

**A-1.10 Government Information Security Reform (P.L. No. 106-398, Div. A, Title X, subtitle G)**

This legislation amends 44 U.S.C. Chapter 35 by enacting a new subchapter on "Information Security". The Security Act requires the establishment of service wide information security programs, annual service program reviews, annual independent evaluations of service programs and practices, service reporting to OMB, and OMB reporting to Congress. The Act covers programs for both unclassified and national security systems, but exempts agencies operating national security systems from OMB oversight. The Security Act is to be implemented consistent with the Computer Security Act.

A-1.11 Government Management Reform Act of 1994 (Public Law 103-356)

This legislation expands the requirement for a fully audited financial statement under the CFO Act to 24 agencies and components of federal entities designated by the Office of Management and Budget. The act requires the Department of the Treasury to produce a consolidated financial statement for the federal government, which GAO is to audit annually.

A-1.12 Government Paperwork Elimination Act (GPEA) (P.L. No. 105-277, Div. C, Title XVII)

GPEA requires that by 2003 federal agencies provide, where practicable, for the option of submitting, maintaining, or disclosing information in electronic form as substitute for paper, and for the use and acceptance of electronic signatures.

A-1.13 Government Performance and Results Act of 1993 (5 USC 306)

The law holds federal agencies accountable for achieving program results by measuring program performance against program goals and requires agencies to publicly report their progress. The law improves Federal program effectiveness and public accountability by focusing upon results, service quality, and customer satisfaction. It also requires Federal managers to plan for meeting program objectives and provide annual performance plans covering each program activity set forth in the service budget to the Director of the Office of Management and Budget.

A-1.14 Information Technology Management Reform Act of 1996

See Clinger-Cohen Act.

A-1.15 Paperwork Reduction Act (PRA) of 1995 (Public Law 104-13)

PRA applies life cycle management principles to information management and focuses on reducing the government's information-collection burden. To this end, PRA designated senior information resources manager positions in the major departments and agencies with responsibility for a wide range of functions. PRA also created the Office of Information and Regulatory Affairs within the OMB to provide central oversight of information management activities across the federal



government.

A-1.16 Privacy Act of 1974 (Public Law 93-579)

The Privacy Act protects the privacy of individuals identified in information systems maintained by federal agencies by regulating the collection, maintenance, use, and dissemination of information by such agencies.

A-1.27 Rehabilitation Act of 1973. Sec. 408(b)

This newly revised Section 508 imposes strict requirements for any electronic and information technology developed, maintained, procured, or used by federal agencies.

A-2 Federal Documents

The President's Management Agenda

<http://www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf>.

OMB Circular A-11, Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports

http://www.whitehouse.gov/omb/circulars/a11/current_year/part6.pdf.

GSA: Eight Steps to Develop and Use Information Technology Performance Measures Effectively http://www.gsa.gov/Portal/content/pubs_content.jsp?channelId=-13634&programId=8736&contentOID=116820&contentType=1008&SMEZ=1&cid=4.

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Appendix B – Acronyms

BLM	USDI Bureau of Land Management
CAASD	Center for Advanced Aviation System Development
CFO	Chief Financial Officer
CIO	Chief Information Officer
CKO	Chief Knowledge Officer
COP	Community of practice
FS	USDA Forest Service
HC	Human capital
IC	Intellectual capital
IRM	Information resource management
JEAB	Joint Executive Advisory Board
KM	Knowledge management
USDA	US Department of Agriculture
USDI	US Department of Interior

¹ Adapted from Army Chief Information Officer, *Army Knowledge Management: A Strategic Plan for an Agile Force, version 2.1* (Washington, DC: US Army, August 2001)

² Adapted from Army Chief Information Officer, *Army Knowledge Management: A Strategic Plan for an Agile Force, version 2.1* (Washington, DC: US Army, August 2001)

³ <http://www.worldbank.org/ks/vision.html>

⁴ <http://www.worldbank.org/ks/tg.html>

⁵ <http://www.worldbank.org/ks/askus/index.html>

⁶ <http://www.worldbank.org/ks/initiatives.html>

⁷ Todd Ramsey, IBM